

**CRASC TECHNICAL COMMITTEE
MEETING MINUTES
AUGUST 3, 2011**

1. Call to Order and Approval of Minutes from the Meeting on November 15, 2010 (Slater)

Chair Dr. Caleb Slater called the meeting to order at 10:21 A.M. and adjourned at 2:00 P.M.

Mr. Steve Gephard moved to approve the Minutes from the 11/15/10 meeting. Mr. Matt Carpenter seconded, all were in favor.

Dr. Slater then asked the committee to introduce themselves and requested those in attendance to do the same.

2. Secretary's Report (Sprankle)

Mr. Ken Sprankle provided his Secretary's Report which began with a review of fish count/trap facilities within the basin (refer to attachment A for details by location and species). As of August 1, 2011 a total of 249,480 American shad, 107 Atlantic salmon, 138 blueback herring and 27,233 sea lamprey had been documented at fish passage facilities basin-wide. It was noted that the shad count had increased by roughly 50% from annual counts documented since 2003. The number of adult salmon counted also increased from the 51 counted in 2010. Another note was the record number of American shad counted as passing the West Springfield Project. Mr. Sprankle noted some anomalies with a few escaped salmon at Holyoke due to fishway conditions. Mr. Gephard noted that his crew has also attempted to net a salmon known to be downstream of Leesville Dam. As a result of the discussion it was noted that there are known additional adult salmon in the basin that have not been officially counted. The Committee will wait until after the fall, and the potential to capture these fish, before adding them to the final year-end total. Mr. Sprankle reviewed a figure showing shad passage at Holyoke Dam fishways occurred on three distinct pulses related to rapid decreases and increases in substantial (>40K CFS) river flow, with the upstream passage essentially ending after the first week in June.

Other select regional fish passage counts were provided and reviewed. Shad counts were generally reduced at reporting facilities. River herring fishway counts were variable in terms of increases or decreases along the coast but were considered generally reduced. The dramatic increase in adult Atlantic salmon returns to the Merrimack River were discussed. A total of 402 salmon had been trapped to date with fish being tagged and released back to tributaries. Mr. Joe McKeon elaborated on plans to release more fish prior to spawning. Other salmon rivers in the Gulf of Maine (U.S.A.) also all showed substantial increases in documented adult returns. Mr. Sprankle also reviewed select Canadian Dept. of Fish. And Oceans salmon trap and weir counts which showed generally increased run sizes with variability.

The status of trapped and retained adult salmon was discussed. A total of 95 adult salmon had been transferred to Richard Cronin Station, currently 92 salmon are alive, on site, following three losses. This season has had an unusually high proportion of grilse (29% total run) to date. It was noted that this high proportion of grilse may reduce the need for mature parr.

A brief summary of the CRASC Research Forum (2/8/11) highlights were provided. Approximately 90 people attended the forum where 11 platform presentations were given on a variety of topics.

A limited effort to count sea lamprey nests downstream of barriers on select tributaries in Massachusetts waters was completed by the Coordinator's Office in early July – relatively late due to high flows. Two figures from U.S.G.S, were provided that showed the water temperature profile from Middle Haddam, CT and river discharge from Thompsonville, CT for the period April – July.

3. Salmon Studies Update (Gerardi)

Mr. Lenny Gerardi stated that Mr. Jay McMenemy had retired and he would be the Vermont Dept. of Fish and Wildlife Technical Committee representative from this time forward. Len noted that Mr. Sprankle had talked to him regarding this update and would cover salmon stocking. At this point Mr. Sprankle gave a verbal report that all fry and smolt stocking field data sheets had been received from the agencies and entered into the database. However, a report was not prepared as the Smolt Assessment Report has not been made available yet by CTDEEP and is used to correct the smolt stocking numbers (parr, viable smolts, fatal fin disease). Mr. Sprankle reported that approximately 6 million fed and unfed fry were stocked along with approximately 90,000 age-2 smolts (requires adjustments) in 2011. The CTDEEP report will be completed soon and once available the draft stocking report will be circulated for review by the agencies for accuracy.

Mr. Gerardi reviewed the summary report on radio tagged adult Atlantic salmon prepared by Jay McMenemy (Attachment B). The report summarized that 10 adult fish were tagged at Holyoke Dam, seven of which were known to pass Turners and Vernon dams. One small grilse is known to have escaped capture at Holyoke and is untagged, as was another multi-sea winter salmon that was subsequently captured at Townshend dam (West River). There is a third multi-sea winter salmon also believed escaped and as of this report is undocumented in the returns tally. Six tagged salmon subsequently passed Bellow Falls Dam. Two salmon were in the White River, three passed Wilder, and one had dropped back downstream below Bellows Falls.

Mr. Bob Stira was asked to provide an update on FirstLight Power's Salmon Smolt Mark-Recapture Study for the 2011 run. Mr. Stira stated, as earlier noted, the spring had some very high flow periods which interfered greatly with his study program's ability to mark and recapture smolts. As a consequence, there will be no estimate for the 2011 smolt run from this study. They were only able to mark a total of 130 smolts which is well below the 3,000 fish target. At Holyoke Dam, he noted the bypass sampler did catch 933 wild smolts and 214 hatchery smolts.

4. NASCO Update (Gephard)

Mr. Steve Gephard gave an update as a current member to NASCO. He noted he was unable to attend this spring's meeting in Greenland due to personal matters. He summarized several key points from his fellow members; commercial open ocean fishery remains closed; Greenland does maintain an approved "internal consumption" fishery, quota of 20 tons; and harvest in this fishery has been creeping up, in August 2010, it was estimated that this fishery had in fact harvested 50 tons of salmon. This is of concern to member countries. Greenland has claimed there is an increase in salmon abundance. Mr. Gephard noted here that although many of our N. American rivers were earlier noted to see increases in adult returns this spring, the data from mixed stock monitoring programs indicate levels of abundance are still very low. He noted there are many fishery buy-outs that will be up for renewal next year. The

Saint Pierre And Miquelon Islands fishery remains small at an estimated 4 tons. This was the first year of biological data gathered and it was shown that 6% of the catch were U.S.A fish. Mr. Gephard stated a coming change with the USA NASCO delegation as its head, Pat Kurkel (NOAA Fisheries), will be retiring. The next meeting will be in Scotland. Mr. Joe McKeon asked if George LaPointe (EX Maine DMR Chief) was still a member. Mr. Gephard responded, yes he was. Mr. Matt Carpenter asked what 6% of 4 tons of landed salmon translates to in numbers. Mr. Gephard stated that is was less than 15 fish and then noted that the St Pierre fishery appears to mostly target kelts from Canadian rivers, post spawn.

5. Fish Culture (Marchant – not present, reported by Slater)

Dr. Slater reviewed a Subcommittee Report prepared by Mr. Dan Marchant (Attachment C). Highlights are summarized here: Committee met on March 1, 2011 and reviewed 2010 Spawning Season – parr hormone study report was reviewed (CTDEEP produced); pre-spawn meeting scheduled for August 30, collection of parr for fish health testing occurred first week of August. Overall egg production was 10.793 million eggs from all sources in 2010. WRNFH had the greatest contribution at 6.066 million eggs. The smallest contribution was from Richard Cronin's sea-run fish at 179,000 eggs. Kelts were transferred from Cronin to North Attleboro NFH – have 15 kelts from 2009 year class and 23 from 2010 year class. WRNFH had transferred 1,000 spent and barren fish to Kensington SFH for future broodstock. WRNFH is presently holding five year classes of brood, prospects for this year are reduced egg production due to small size fish (replacements from DDENFH smolt line – address cataract situation with WRNFH line). Preparations are being made to complete transfer of incubation equipment from Cronin Station to WRNFH. Sea-run eggs will be taken directly to WRNFH following spawning, as had been the practice prior to IPN detection. Incubation will be in a biosecure separate area where water effluent will be UV treated. USFWS has consulted with VTDWF on fish health concerns. All Ct Program domestic salmon hatcheries have been inspected this spring and summer and were found negative for listed pathogens.

Dr. Slater asked Mr. Larry Lofton on the status of the North Attleboro kelts and he responded they were looking good, both 2009 and 2010 year classes. Dr. Slater asked Mr. Mickey Novak about the transfer of incubation equipment to WRNFH. Mr. Novak stated it was complete. Mr. Gephard asked for a clarification that there was to be no incubation at Cronin and Mr. Novak replied yes.

Dr. Slater referred the group to Dr. Bill Ardren's handout regarding the shift in incubation from Cronin to WRNFH (Attachment D). Mr. Ken Gillette reviewed the steps taken at WRNFH and noted the quarantine area set up was going well.

Mr. Sprankle then reviewed a handout provided by Mr. Henry Bouchard (DDENFH) that summarized smolt stockings for the program in the spring of 2011 (Attachment E). In total, 90,973 age-2 smolts were stocked into the Deerfield River and Farmington River. Another 1,218 smolts were provided for three study efforts. An additional 4,800 smolts from Berkshire NFH were stocked in the Westfield River.

Mr. Gephard reviewed a report by Mr. Bruce Williams (CTDEEP) on the use of hormones on parr at Cronin in 2010. The report covered the study design, data, conclusions, and recommendations. It was noted that Dr. Steve McCormack's study design and involvement were appreciated. Findings were that hormone use will accelerate milt production in September and early October which can be periods of naturally low levels of milt – not coinciding with early sea-run adult needs in male limited situations.

Mr. Gephard reviewed the status of Kensington SFH given some severe state budget issues that could impact the facility. KSFH was listed for closure by the Governor but the budget issue is very dynamic as the state employee unions work to have another vote to accept concessions that would change likelihood of this closure. A plan to deal with a potential closure for this fall, to ensure fish are spawned, has been developed with USFWS using Cronin Station for support.

6. Smolt Advisory (Gephard)

Mr. Gephard noted that the earlier mentioned Smolt Assessment Report was behind schedule and requires some additional information from Henry Bouchard. CTDEEP plans to get this information from Henry soon. Mr. Gephard gave a verbal summary of this assessment that occurred in February 2011. He noted that the assessment showed an 87% viable smolt component which is the second highest in the time series. The fish were noted as being in exceptionally good condition.

7. Genetics (Gephard)

Mr. Gephard reviewed an update on the genetic family marking program analyses currently being conducted by Dr. Meredith Bartron. The update showed some small numbers of missing tissue samples among life stages and years which were listed. Overall, year 1 samples in hand total 3,994 from an expected total of 4,334 (92%). The percentage of year 1 samples extracted is $3,792 \text{ (out of } 4,334) = 87.5\%$ with 1,345 (out of 4,334) = 31% of the total having been genotyped. Dr. Bartron noted that she will be able to provide Dr. Ben Letcher data in December.

Mr. Bill Archambault addressed the group to acknowledge the appreciation for the contributions made by NOAA in the purchase of needed chemicals for this work. (KIS note: chemicals were also contributed as part of the VT State Wildlife Grant).

Mr. Gephard next asked the Committee to refer to a final draft of the Broodstock Management Plan which he had recently completed with help from Dr. Bartron and the subcommittee. Mr. Gephard asked that the Technical Committee please review the Plan and get any edits to him in advance of the September 29th CRASC meeting, where he would like to present it to the Commissioners. Mr. Gephard gave a brief outline of the Plan, its components and its design which had the purpose of committing to a written record a wide and complex diversity of activities to better document this aspect of the Program. The Draft Plan was for internal review only.

Dr. Slater stated that the Technical Committee could have an email vote to accept the Plan prior to the September 29th CRASC. He noted that when it goes to CRASC, if as hoped on Sept 29th, it will a publicly available document.

8. Fish Passage (Warner)

Mr. John Warner provided a handout (Attachment F), which summarized fish passage activities in the basin. Some highlights include Holyoke Dam is no longer pursuing a large screen exclusion due to high cost at intakes. Mr. Warner noted that the issues associated with this are related to shortnose sturgeon and American eel, bottom orientated species after a question by Mr. Bill McDavitt on salmon smolts impacts and the project. Mr. Warner continued with an update at the Turners Falls Dam when he was asked by Mr. Karl Meyer why the agencies are pursuing bringing fish into the canal. Mr. Warner responded that we have fishways at the dam – spillway ladder and at Cabot Station, we will always be

faced with the fact that in most years, river flows will be primarily directed into the canal and thus fish headed upriver and will congregate at Cabot Station tailrace. Relicensing for this project is 2018, Cabot is acknowledged as an upstream fish passage issue that must be addressed. The agencies do not know what will happen with relicensing, relative to bypass flows, which are only required for a minimal zone of passage in the fish passage season, (not for sturgeon - KIS). The agencies are working with the current long-standing issue of upstream passage at Cabot with the plan to install a fish lift. It must be addressed. Mr. Meyer asked about sturgeon and flows in the bypass reach and below Cabot and the need to address them. Mr. Warner stated that relicensing is when that will be addressed. Unless NOAA states that the license needs to be re-opened due to new information, consultation will wait. It is likely that flow in the bypass reach will change. Mr. Meyer asked why the agencies can not re-open the license. Mr. Warner replied if we tried to re-open burden is on us, we can wait a few years and the burden of information is placed on the operator. He noted we don't like the deals that were made 30 and 40 years ago. We have been effective in going to FERC for salmon smolts, however, to do a flow study would be very costly. Mr. Meyer asked if the minutes from the meeting on the proposed fish lift and the canal were available as the public is not a part of this process. Mr. Bill Archambault (USFWS) replied that if you want this information you can file for a Freedom of Information Act.

Mr. Warner went on to read an update on the Turners Falls Shad Passage Study being conducted by Dr. Ted Castro-Santos. A study report is expected this fall. Preliminary results from 2011 are that the findings of various passage rates are consistent with 2010 results from radio and PIT tagged fish released in the lower canal. Dr. Castro-Santos reports that "we continue to see greater passage performance from Holyoke transported shad (55% entering gatehouse compared with 32% of shad captured at Cabot ladder exit). Overall passage was 36.5% which is slightly better than last year (about 28%). More details will be covered in the report. Mr. Bill McDavitt asked what the timeline for the new lift was. Mr. Warner replied there is no timeline, need the design, and then the agreement.

Dr. Slater addressed Mr. Meyer stating he thought he was asking good questions but that he needs to realize we are addressing a specific issue, Cabot Ladder shad passage, that does not work. There will always be a need for passage at Cabot Station. However, this does not preclude potential needs for passage at the dam. Mr. Meyer then stated that the Commission has not directly addressed the power company and it must. Dr. Slater noted he appreciated Karl's concern and hope his and others involvement will occur in relicensing including other advocacy group like the CT River Watershed Council. Mr. Gephart stated that if the power canal is a complete loss for fish that find themselves there, then Karl's point is valid. He notes that data from Dr. Castro-Santos studies show it is not in fact a dead-end, fish that were tagged and released from Holyoke Fish Lift capture group passed through gatehouse (refer to study results). Mr. Meyer again stated his belief that the original river channel up to the dam is the way the agencies should be proceeding for addressing fish passage. Mr. Matt Carpenter stated the public needs to think about power versus natural resources – if the public can pressure FERC we can change things. As managers we work within our limits.

Mr. Warner continue with an update on Vernon Dam which included the discovery of a passage issue in the lower ladder, until then inaccessible for checks, in June. Damaged weir boards (baffles) were replaced. A walkway will be completed to permit access and inspection for next year. Mr. Gephart asked if this issue in the lower ladder has been there in the past. Mr. Warner stated it was likely but it's unclear.

Ms. Andrea Donlon asked Mr. Warner about the issue with trash rack spacing reductions at Holyoke intakes. Mr. Warner explained that in some cases bar spacing becomes an issue with hydraulics, simply

cannot put ¾ inch spacing there for this reason so other options need to be explored (for lower water column species – sturgeon, eel).

9. Shad Studies (Sprankle)

Mr. Sprankle referred the members to written report in their packets (Attachment G – refer to for details). The subcommittee had a conference call meeting in March that covered planned activities for shad and river herring for the spring run. One of the primary topics for that meeting was the whole river American shad movement and survival study. In early February the final financial commitments were made from a total of 10 different state and federal agency partners, hydro power operators, as well as several non-government organizations that totaled \$45,000 in cash for the purchase of equipment (receivers and antennas) and radio tags (refer to report for donors list). In addition, in-kind costs and resources and expenditures from USFWS Coordinator's Office, USGS Conte Lab (Partner in study design and implementation) and TransCanada would equate to more than double that amount. Study design is complex and a National Fish and Wildlife Foundation Proposal, submitted in March to fund the study for a second year in 2012, clearly outlines, background, need, objectives, methods, and other details. It is available.

The study has 12 receiver locations from the lower river upriver to the Turners Falls Dam. Receiver coverage is increased in dam/fish pass areas. This area was covered by the Coordinator's Office. Dr Castro Santos covered receivers from Turners Falls Dam to the Vernon Dam, which included the ongoing study area at Gatehouse. A total of 152 shad were tagged by USFWS, 82 at the river's mouth, captured via gill nets, and 70 tagged and released at Holyoke Fish Lift. Dr Castro-Santos tagged and released an additional 120 shad into the canal at Turners Falls. All radio tagged fish were PIT tagged. Receivers were downloaded weekly or more frequently with the intent of gathering both upstream and downstream movements. As a result, receivers are still in place. One complete whole river check was done by boat from Vernon Dam (VT) to the river mouth in end of July. This project required more staff time than available for the Coordinator and his one paid intern, so volunteers and partner's contributions (CTDEEP) in the field made the study possible from mid April through early June, due to the gill netting effort.

Mr. Sprankle asked Ms. Jacque Benway (CTDEEP) to provide her report on American shad statistics for the river. Ms. Benway reviewed a handout that included landings data history (1990-2010) which shows the dramatic decline in the commercial fishery to the lowest level in the time series for 2010. Age structure remains contracted, with 3,4,5 and a small component of 6 year old fish. Repeat spawner component remains very low at 7.2%, both sexes. An impressive change in 2010 was very strong juvenile seine survey catches for both shad and blueback herring. The blueback number is of greatest interest as it was at all time low levels from late 1990s until 2010, when it rebounded to a value of over 300/net compared to 12/net in 2009. Ms. Benway noted that CTDEEP will be submitting its required American shad Sustainability Plan to the Atlantic States Marine Fisheries Commission in mid September for their review.

Mr. Sprankle noted that the Turners Falls Canal outage is scheduled for September 10 through September 18. The agencies held a conference call on this topic in June. It was agreed with the power company to improve pre draw down and post draw down assessments with a focus on juvenile American shad. The power company will operate its Cabot Bypass Sampler 5 days prior to draw down to determine if juvenile shad are making downstream movements and to what extent. In addition, a consultant will be hired to conduct surveys for stranded fish in the canal. This work will be done in

conjunction with Conte Lab staff. The Coordinator's Office will conduct visual inspections from the dam downriver for juvenile shad, where/if visible, in the bypass reach.

Mr. Bob Stira noted that he is checking SalmonSoft count accuracy (Turners Falls Fishways) with Dr. Castro-Santos. Dr. Slater asked when that will be available. Mr. Stira promised to get Dr. Slater that assessment to him by mid-September hopefully.

10. Other Business

Mr. Bill Archambault presented information on the federal budget for FY12 and out years. The President's budget has a reduction for Fisheries, the House budget also has a reduction, the Senate budget proposal is not known. Reductions are targeted specifically at mitigation hatcheries. There are also general programmatic reduction in hatcheries. There are other areas of reduction as well. Overall, the Fisheries budget FY12 – House mark, is a reduction of more than \$10 million. The Service will be preparing briefing in next 6 weeks for the Agency Directors and Fish Chiefs. The bottom line is that the FY12 Fisheries outlook is a smaller program.

The Committee went around the table for state updates. Connecticut's situation was covered earlier with the hope that state unions will accept Governors plan and avoid major department cuts. Massachusetts budget is considered in decent shape. New Hampshire has unresolved budget issues, implications for Departments is unclear at this time. Vermont's budget is considered in decent shape. Dr. Steve McCormack stated that USGS – Conte budget is OK at this time, but they have been short several positions which have been a cost savings. Director Bill Lellis is gone and a new Lab Director will be coming soon. He noted that earmarks which have provided funding in the past are not likely.

Mr. Sprankle noted the request from RIDEM to obtain several hundred parr and smolts to help repopulate one of their hatcheries support salmon restoration. The request had been circulated via email prior to this meeting. Discussion on this topic was not in favor given low levels of fish in all hatcheries. However, in the instance that Kensington SFH must close, Mr. Gephard noted that it would be appropriate to provide fish from that hatchery. He did not believe this is a likely scenario for that hatchery. The Committee agreed that only if the Kensington Hatchery were to close would the Program provide the requested fish as much as they would like to say yes. Mr. Sprankle was directed to respond back to RIDEM with the response.

Mr. Joe McKeon spoke that his office has met with RIDEM on salmon restoration and he stated the Service interest in shifting to shad. His USFWS office and hatchery are supporting new initiatives on that front with marked larvae releases in Pawcatuck River with RIDEM.

Mr. Jim Carroll (CT River Atlantic Salmon Association) addressed the Committee to report on the impact of the Salmon in the Schools Program in CT and the larger basin. He noted that in CT alone, he estimates 10,000 students are provided an opportunity to learn important ecological lessons that extend beyond simply Atlantic salmon. He note that this past spring the CRSA was a proud recipient of the National Fish and Wildlife Foundation's Annual Conservation Award, and traveled to D.C. with Dick Bell for that award.

Mr. Gephard stated that at this time it is important to acknowledge the retirement of Mr. Jay McMenemy from his career with VT Fish and Wildlife, set to occur in September. Mr. Gephard requested the Committee make a Resolution to acknowledge Jay and it was unanimously agreed to by

the Committee. The Technical Committee thereby resolved that Mr. Jay McMenemy has admirably served the Connecticut River Atlantic Commission in a significant professional capacity over his entire career, as Technical Committee Chair, Chair of Subcommittees, and a lead Program representative to the U.S. Atlantic Assessment Committee, while taking on many ancillary duties as needed to get important work done in areas of fish passage, management, research, and fish culture. Jay's many significant positive impacts to the program are perhaps most importantly measured by his high standards for scientific rigor and quality data to keep the highest professional standards for our program, with good humor and camaraderie that will be missed. The Committee wishes Jay and his wife Nancy the best on their coming adventures.